GRANTS MINING DISTRICT FIVE-YEAR PLAN

QUESTION: What is the current status of the Grants Mining District Five-Year Plan activities for assessing health and environmental impacts of uranium mining and milling in northwest New Mexico?

ANSWER:

- EPA and other federal, state, and tribal agencies participating in the Five-Year Plan continue to identify contamination caused by uranium mining and milling and to conduct and coordinate response actions in accordance with appropriate laws, regulations and policies within their jurisdictions. These efforts are being conducted and coordinated to achieve the following objectives of the Plan:
    - Assessment of water sources for contamination;
    - Assessment and cleanup of legacy uranium mines;
    - Assessment, cleanup and long-term management of former uranium mill sites;
    - Assessment and cleanup of contaminated structures.

- Assessment of Water Sources: EPA and the New Mexico Environment Department (NMED) continue to assess water sources for contamination. Private water wells in the area of the Homestake Uranium Mill Superfund site and throughout the Grants Mining District and the public water supply wells for the village of Milan will be sampled in the summer and fall of 2014. A request for this sampling was made by the environmental group Bluewater Valley Downstream Alliance (BVDA). The village of Milan water supply wells are located downgradient of the Homestake site and the Department of Energy's (DOE's) Anaconda Bluewater Uranium Mill site. Current data do not show contamination at the public water supply wells.

- Assessment and Cleanup of Legacy Uranium Mines: Under a 2012 Administrative Order on Consent for Removal Action, EPA is directing a responsible party to perform an engineering evaluation/cost analysis (EE/CA) for remediation at the Johnny M Mine. Over 200,000 cubic yards of soil at the mine are contaminated with Radium 226 and metals. The Bureau of Land Management (BLM) conducted an environmental assessment at the Spencer Mine, where erosion has resulted in the mine shaft being head cut by an arroyo and filled with sediment. The head frame has also fallen over. BLM is planning to prepare a design reclamation plan. The U.S. Forest Service (USFS) conducted preliminary assessments and site inspections at the Zia, Taffy, old La Jara and Vallejo mines located on USFS lands in 2012 and plans to complete EE/CAs for closure/remediation at those mines in 2014 to address soil contamination. EPA plans to explore options for conducting CERCLA response actions at over twenty former Kerr McGee mines which are part of the Tronox Chapter 11 Bankruptcy Settlement and Fraudulent Conveyance Claims against Kerr McGee Corporation Settlement. Aerial and field gamma radiation surveys and soil sample data indicate CERCLA releases of hazardous substances to soil has occurred at many of these mines. Additionally, EPA and NMED are continuing to perform a ground water investigation at the San Mateo Creek drainage basin, where the majority of the legacy mines are located. Contamination of ground water by Uranium, Selenium and other metals is widespread in the basin. Known or potential sources are the mines and uranium mills. Ground water data are to be collected in 2014 and 2015.

- Assessment, Cleanup, and Long-Term Management of Former Uranium Mill Sites: DOE continues to investigate the extent of ground water contamination at the Anaconda Bluewater mill site, including sampling 10 new ground water monitoring wells installed in 2012 as well as six private wells located beyond the perimeter of the site.

- Assessment and Cleanup of Contaminated Structures: EPA has performed radiological assessments at 891 residential properties and structures under its removal authority since 2009, primarily in Hispanic villages, Laguna and Acoma Pueblo villages, the subdivisions near the Homestake mill site and the village of Bluewater. Of those, 128 properties had radiation above action levels, 83 properties have been cleaned up, and another 45 properties in the village of Bluewater and Mormon Farms area south of Homestake are targeted for cleanup.

BACKGROUND:

- The Grants Mining District Five-Year Plan was developed by federal, state and tribal agencies in 2010. The purpose of the Plan was to compile, coordinate and guide all activities contributing to the identification and eventual cleanup of contamination from the legacy mining and milling activities to maximize efforts and resources.

- The Grants Mining District comprises an area of 100 miles by 25 miles where uranium mining and milling occurred from the 1950s to the 1990s. Within the District, 97 legacy mines were initially identified with potential for health threats and assigned to the appropriate federal or state agency for further investigation.

- Fifty-seven (57) mines were assigned to EPA and are under evaluation; one has been placed on the NPL (Jackpile, located on Laguna Pueblo land), while CERCLA releases to soil have been documented for nine others, with one of those currently being investigated as a Non-Time-Critical Removal Action (Johnny M Mine, near the village of San Mateo in McKinley County).

- A large number of legacy mines were operated as wet mines in the San Mateo Creek drainage basin. The underground workings were dewatered to access the ore and the contaminated mine water was pumped to the surface and discharged untreated to surface drainage features (creeks and arroyos). As a result of this process, billions of gallons of mine water infiltrated into the subsurface and saturated the shallow alluvium and underlying bedrock aquifers, resulting in widespread contamination of ground water by Uranium, Selenium and other metals.

- There are five former uranium mills in the Grants Mining District: four are under DOE long-term surveillance and management and the fifth (Homestake NPL site) is being addressed by EPA/NRC. All of these facilities contaminated ground water.